

## Amendments to the Specification

Please replace paragraphs [052] and [053] with the following revised paragraphs:

[052] In some embodiments, the at least one replacement mutation comprises replacing an amino acid having an uncharged polar side group, chosen from G, S, T, Y, N, and Q, with an amino acid having a nonpolar or hydrophobic side group, chosen from A, V, L, I, P, F, and M. The at least one mutation can be, for example, G47F and/or G49F.

[053] In some embodiments, the at least one replacement mutation comprises replacing a polar basic amino acid that is positively charged at pH 6.0-7.0, chosen from K, R, and H, with an amino acid having a polar nonpolar or hydrophobic side group, chosen from A, V, L, I, P, F, and M. The at least one mutation can be chosen from, for example, H46A; and R48A,and H47F.

Please replace paragraphs [0110] and [0111] with the following revised paragraphs:

[0110] In other specific variants, amino acids with uncharged polar side groups were replaced with phenylalanine (e.g., G47F and G49F). Other uncharged polar groups that can be targeted include S, T, C, Y, N, and Q. These residues can be replaced with amino acids having nonpolar or hydrophobic side groups, such as A, V, L, I, P, F, W, and M.

[0111] In other variants, polar basic amino acids that are positively charged at pH 6-7 have been replaced with alanine (e.g., H46A; and R48A) ~~or phenylalanine (e.g., H47F)~~. Polar basic amino acids include, but are not limited to, K, R, and H. Other amino acids having nonpolar or hydrophobic side groups, besides A and F, include F, V, L, I, P, W, and M.